(FILE 'HOME' ENTERED AT 11:24:35 ON 02 NOV 2010)

FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH, LIFESCI' ENTERED AT 11:25:26 ON 02 NOV 2010

- L1 259392 S TGF-ALPHA OR THROMBIN OR PDGF-AB OR IGF-1 OR HGF
- L2 275579 S (PROMOT? OR STIMULAT? OR INCREAS? OR ENHANC?) (7A) (ACCUMULAT?
- L3 196956 S (MESENCHYMAL OR STROMAL) (4A) CELL
- L4 4148 S L2(P)L3
- L5 241 S L1(P)L4
- L6 86 DUP REM L5 (155 DUPLICATES REMOVED)
- L7 994 S L2(10A)L3
- L8 42 S L7(P)L1
- L9 17 DUP REM L8 (25 DUPLICATES REMOVED)
- => d au ti so pi 1-17 19
- L9 ANSWER 1 OF 17 MEDLINE on STN DUPLICATE 1
- AU Esencay Mine; Newcomb Elizabeth W; Zagzag David
- TI HGF upregulates CXCR4 expression in gliomas via NF-kappaB: implications for glioma cell migration.
- SO Journal of neuro-oncology, (2010 Aug) Vol. 99, No. 1, pp. 33-40. Electronic Publication: 2010-02-16.

  Journal code: 8309335. E-ISSN: 1573-7373. L-ISSN: 0167-594X.
- L9 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 2
- AU Li, Yangxin; Yu, XiYong; Lin, ShuGuang; Li, XiaoHong; Zhang, Saidan; Song, Yao-Hua
- ${\tt TI}$  Insulin-like growth factor 1 enhances the migratory capacity of mesenchymal stem cells
- SO Biochemical and Biophysical Research Communications (2007), 356(3), 780-784
  CODEN: BBRCA9; ISSN: 0006-291X
- L9 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN
- AU Ozaki, Yoshie; Nishimura, Masahiro; Sekiya, Kensuke; Suehiro, Fumio; Kanawa, Masami; Nikawa, Hiroki; Hamada, Taizo; Kato, Yukio
- TI Comprehensive Analysis of Chemotactic Factors for Bone Marrow Mesenchymal Stem Cells
- SO Stem Cells and Development (2007), 16(1), 119-130 CODEN: SCDTAE; ISSN: 1547-3287
- L9 ANSWER 4 OF 17 MEDLINE on STN
- AU Schwartz-Arad D; Levin L; Aba M
- TI The use of platelet rich plasma (PRP) and platelet rich fibrin (PRP) extracts in dental implantology and oral surgery.
- SO Refu at ha-peh eha-shinayim (1993), (2007 Jan) Vol. 24, No. 1, pp. 51-5, 84.

  Journal code: 9816240. ISSN: 0792-9935. L-ISSN: 0792-9935.
- L9 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN
- AU Hiscox, Stephen; Jordan, Nicola J.; Jiang, Wen; Harper, Maureen; McClelland, Richard; Smith, Chris; Nicholson, Robert I.
- TI Chronic exposure to fulvestrant promotes overexpression of the c-Met receptor in breast cancer cells: implications for tumour-stroma interactions
- SO Endocrine-Related Cancer (2006), 13(4), 1085-1099 CODEN: ERCAE9; ISSN: 1351-0088
- L9 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN

IN Kato, Yukio; Nishimura, Masahiro; Ozaki, Yoshie; Tuji, Koichiro

TI Damaged tissue therapeutic agent and therapeutic method

SO PCT Int. Appl., 33 pp.

CODEN: PIXXD2

	PATENT NO.					KIN	D	DATE		APPLICATION NO.						DATE					
ΡI	WO	2005094888				A1		20051013		WO 2005-JP6320						20050331					
		W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	AΖ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,			
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,			
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KΡ,	KR,	KΖ,	LC,			
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,			
			NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,			
			SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
		RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,			
			AΖ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,			
			EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IS,	ΙT,	LT,	LU,	MC,	NL,	PL,	PT,			
			RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	${ m ML}$ ,			
			MR,	ΝE,	SN,	TD,	ΤG														
	AU	2005228778				A1		2005	1013	AU 2005-228778						20050331					
	ΑU	2005228778			В2		2010	0401													
	ΕP	1736173			A1	A1 20061227			EP 2005-727997						20050331						
		R:	CH,	DE,	DK,	FR,	GB,	LΙ													
	US 20080254019					A1		2008	1016	•	US 2006-594595						20060928				

- L9 ANSWER 7 OF 17 MEDLINE on STN DUPLICATE 3
- AU Liu Hong-Jun; Duan Hai-Feng; Lu Zhuo-Zhuang; Wang Hua; Zhang Qun-Wei; Wu Zu-Ze; Wang Li-Sheng
- TI Influence of hepatocyte growth factor on biological characteristics of bone marrow-derived mesenchymal stem cells.
- SO Zhongguo shi yan xue ye xue za zhi / Zhongguo bing li sheng li xue hui = Journal of experimental hematology / Chinese Association of Pathophysiology, (2005 Dec) Vol. 13, No. 6, pp. 1044-8.

  Journal code: 101084424. ISSN: 1009-2137. L-ISSN: 1009-2137.
- L9 ANSWER 8 OF 17 MEDLINE on STN DUPLICATE 4
- AU Hideshima Teru; Podar Klaus; Chauhan Dharminder; Anderson Kenneth C
- TI Cytokines and signal transduction.
- SO Best practice & research. Clinical haematology, (2005) Vol. 18, No. 4, pp. 509-24. Ref: 144

  Journal code: 101120659. ISSN: 1521-6926. L-ISSN: 1521-6926.
- L9 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN
- IN Kollet, Orit; Lapidot, Tsvee
- ${\tt TI}$  Culture of stem cells with increased sensitivity to a chemoattractant by exposing the stem cells to HGF and applications in cellular therapy
- SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

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PI	WO 2004090121 WO 2004090121					A2 A3		2004 2004		WO 2004-IL315						20040407				
		W:						AU,												
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,		
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,		
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,		
			NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,		
			BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,		
			ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,		
			SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,		

TD, TG AU 2004227205 20041021 AU 2004-227205 A1 20040407 AU 2004227205 B2 20100610 20041021 CA 2004-2519975 CA 2519975 A1 20040407 EP 1613742 A2 20060111 EP 2004-726247 20040407 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR JP 2006522604 Τ 20061005 JP 2006-507603 20040407 US 20070172464 Α1 20070726 US 2005-552331 20051007 NO 2005005227 Α 20051107 NO 2005-5227 20051107

- L9 ANSWER 10 OF 17 MEDLINE on STN DUPLICATE 5
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- TI Effects of platelet growth factors on human mesenchymal stem cells and human endothelial cells in vitro.
- SO European journal of medical research, (2004 Jul 30) Vol. 9, No. 7, pp. 337-44.

  Journal code: 9517857. ISSN: 0949-2321. L-ISSN: 0949-2321.
- L9 ANSWER 11 OF 17 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
- AU Theiss, Arianne L.; Fuller, C. Randall; Liu, Bo; Sartor, R. Balfour; Lund, Pauline K.
- TI Growth hormone reduces the severity of fibrosis associated with chronic intestinal inflammation.
- SO Gastroenterology, (APR 2004) Vol. 126, No. 4, Suppl. 2, pp. A282.

  Meeting Info.: Digestive Disease Week/105th Annual Meeting of the
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  -20, 2004. Amer Gastroenterol Assoc.

  CODEN: GASTAB. ISSN: 0016-5085.
- L9 ANSWER 12 OF 17 MEDLINE on STN DUPLICATE 6
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- SO Platelets, (2004 Feb) Vol. 15, No. 1, pp. 29-35. Journal code: 9208117. ISSN: 0953-7104. L-ISSN: 0953-7104.
- L9 ANSWER 13 OF 17 MEDLINE on STN DUPLICATE 7
- AU Schmidinger Gerald; Hanselmayer Georg; Pieh Stefan; Lackner Birgit; Kaminski Stephan; Ruhswurm Irene; Skorpik Christian
- TI Effect of tenascin and fibronectin on the migration of human corneal fibroblasts.
- SO Journal of cataract and refractive surgery, (2003 Feb) Vol. 29, No. 2, pp. 354-60.

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- L9 ANSWER 14 OF 17 MEDLINE on STN DUPLICATE 8
- AU Briggs M C; Grierson I; Hiscott P; Hunt J A
- TI Active scatter factor (HGF/SF) in proliferative vitreoretinal disease.
- SO Investigative ophthalmology & visual science, (2000 Sep) Vol. 41, No. 10, pp. 3085-94.

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- L9 ANSWER 15 OF 17 MEDLINE on STN DUPLICATE 9
- AU Fukaya T; Sugawara J; Yoshida H; Murakami T; Yajima A
- TI Intercellular adhesion molecule-1 and hepatocyte growth factor in human endometriosis: original investigation and a review of literature.

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  Journal code: 7900587. ISSN: 0378-7346. L-ISSN: 0378-7346.
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- AU Weimar I S; Voermans C; Bourhis J H; Miranda N; van den Berk P C; Nakamura T; de Gast G C; Gerritsen W R
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- SO Leukemia: official journal of the Leukemia Society of America, Leukemia Research Fund, U.K, (1998 Aug) Vol. 12, No. 8, pp. 1195-203.

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- L9 ANSWER 17 OF 17 MEDLINE on STN DUPLICATE 11
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- TI Thrombin stimulates smooth muscle cell procollagen synthesis and mRNA levels via a PAR-1 mediated mechanism.
- SO Thrombosis and haemostasis, (1998 Feb) Vol. 79, No. 2, pp. 405-9. Journal code: 7608063. ISSN: 0340-6245. L-ISSN: 0340-6245.

## => d ab 13-17 19

- L9 ANSWER 13 OF 17 MEDLINE on STN DUPLICATE 7
- AΒ PURPOSE: To investigate the effect of fibronectin and tenascin on the migration of corneal fibroblasts. SETTING: Department of Ophthalmology, University of Vienna, Medical School, Vienna, Austria. METHODS: Using human corneal fibroblasts, a monolayer migration assay was performed to measure corneal fibroblast movement. The migration on collagen I, fibronectin, and tenascin with and without transforming growth factor ( TGF)-alpha/fibroblast growth factor (FGF)-2 stimulation and the effect of soluble tenascin and fibronectin on corneal fibroblast migration on collagen-I-coated wells were investigated. RESULTS: The cytokines TGF-alpha and FGF-2 stimulated migrational activity of corneal stromal cells in a dose-dependent manner, reaching the maximum effect at 100 ng/mL and 10 ng/mL, respectively. The migration of corneal fibroblasts on fibronectin was significantly higher (P <.05) than the migration on collagen I. Transforming growth factor-alpha and FGF-2 increased radial cell displacement independent of the provided matrix composition. Tenascin had a negative effect on corneal fibroblast adhesion/migration in this in vitro model. CONCLUSION: Fibronectin and tenascin influenced corneal fibroblast migration and adhesion, respectively, and may play a role in stromal cell movement during wound healing. The cytokines TGF-alpha and FGF-2 had an additive effect on corneal fibroblast migration on a fibronectin matrix.
- MEDLINE on STN ANSWER 14 OF 17 L9 DUPLICATE 8 AΒ PURPOSE: Hepatocyte growth factor/scatter factor (HGF/SF) possesses mitogenic, motogenic, and morphogenic properties and has recently been implicated in various retinal diseases. The role of HGF/SF in proliferative vitreoretinal disease was investigated. METHODS: Sections of epiretinal membranes were stained immunohistochemically for cytokeratins, to identify HRPE cells, and for HGF/SF receptor (c-Met). Cultured HRPE cells were stained for c-Met and investigated for shape change in response to HGF/SF, by using image analysis. The dose-response relationship for HRPE cells to HGF/SF was investigated by a cell migration assay and the specificity of this response evaluated by a neutralization experiment. Subretinal fluid (SRF) and vitreous from patients with retinal detachment and proliferative vitreoretinopathy (PVR) plus vitreous from eyes obtained

after death, eyes with macular hole, and eyes with proliferative diabetic retinopathy (PDR) were investigated for the presence of HGF/SF using an enzyme-linked immunosorbent assay (ELISA). HGF/SF activity was measured using an MDCK cell scatter assay. RESULTS: HRPE cells in epiretinal membranes and in culture expressed c-Met. Cultured HRPE cells responded to HGF/SF by an epithelial-tomesenchymal shape change and by cell migration , a response that increased with increasing concentrations of HGF/SF. This response was reduced in the presence of neutralizing antibody. There was evidence of HGF/SF in increasing concentrations in more severe PVR and in PDR when measured by ELISA, and, conversely, there was evidence of correspondingly decreasing HGF/SF activity when measured by MDCK cell scatter assay in these diseases. CONCLUSIONS: HGF/SF is present in normal and pathologic vitreous. HRPE cells respond by shape change and cell migration to HGF/SF. Concentrations of HGF/SF increase in proliferative vitreoretinal disease and increase in turn with increased severity of the disease, but HGF/SF bioactivity decreases (consistent with activator depletion). These findings are consistent with the hypothesis that HGF/SF may play a role in the HRPE mesenchymal transformation that typifies PVR.

- ANSWER 15 OF 17 MEDLINE on STN DUPLICATE 9 Defects in the cell-mediated immune system may play a role in the AΒ pathogenesis or progression of pelvic endometriosis. Possible mediators include macrophages, interleukins-1 and -6, and tumor necrosis factor-alpha. More recent work points to the involvement of adhesion molecules and growth factors. To clarify the pathogenesis of endometriosis, we compared the characteristics of soluble intercellular adhesion molecule-1 (soluble ICAM-1) and hepatocyte growth factor ( HGF) in women with and without endometriosis. We found that, in patients with endometriosis, the concentrations of soluble ICAM-1 in peritoneal fluid increased and interfered with the activity of natural killer cells. We also found that HGF secretion was significantly increased in cultured endometrial stromal cells, and that HGF stimulated the proliferation and migration of, and morphogenic changes in, endometrial epithelial cells. HGF and ICAM-1 play important roles in the initiation and regulation of endometriotic lesions on the microenvironment level. The increased secretion of HGF by eutopic endometrial stromal cells may contribute to the pathogenesis of endometriosis, whereas the increased levels of soluble ICAM-1 may impair natural killer cell activity and accelerate the progression of the disease.
- MEDLINE on STN ANSWER 16 OF 17 DUPLICATE 10 T.9 Hepatocyte growth factor (HGF), also known as scatter factor AΒ (SF), is produced by mesenchymal cells, including bone marrow (BM) stromal cells, and has mitogenic and motogenic effects on a variety of cell types. Recently, a role has been assigned to HGF/SF and its receptor, c-MET, in both normal and malignant hemopoiesis. We investigated the function of HGF/SF on hemopoietic mononuclear cells (MNC) from patients with acute myeloid leukemia (AML) and myelodysplastic syndrome (MDS) with circulating blasts. In contrast to results with normal MNC, HGF/SF alone stimulated the proliferation and colony formation of MNC from these patients. MNC from some (4/13) of the AML patients also produced HGF/SF (0.1-0.2 ng/ml/day), while we could not detect HGF/SF in cultures from normal MNC. Furthermore, it appeared that HGF/SF induced migration of leukemic cells in Boyden using KGla cells as a model for leukemic blasts. The membranes dividing the two compartments of the Boyden chambers were coated with fibronectin.

HGF/SF significantly promoted migration in 3/5 samples of MDS patients and in 5/7 samples of AML patients. Supernatant of human BM stromal cells, which is chemoattractive for normal human hemopoietic progenitor cells, also promoted migration of MNC from 4/5 MDS patients and 6/7 AML patients. Since HGF/SF is one of the growth factors produced by BM stromal cells, a neutralizing antibody directed against HGF/SF was added to the BM stroma supernatant, which reduced migration significantly in 2/3 MDS and in 3/6 AML responders to BM stroma supernatant. In conclusion, HGF/SF promotes proliferation and migration of hemopoietic cells from AML and MDS patients in vitro and may therefore contribute to the malignant potential of these cells.

ANSWER 17 OF 17 MEDLINE on STN L9 DUPLICATE 11 AB Thrombin is a serine protease involved in haemostasis which exerts a number of cellular effects, including stimulating mesenchymal cell migration, proliferation, and has been implicated both in normal wound healing and pathological conditions associated with hyperproliferation of smooth muscle cells such as atherosclerosis and restenosis. We hypothesize that thrombin , in addition to its proliferative effects, may also influence the deposition of matrix proteins at sites of vascular injury by directly stimulating smooth muscle cell procollagen production. 10 nM thrombin significantly stimulated rat aortic smooth muscle cell procollagen production by 34 +/- 3% compared to media control cells over a 48 h incubation period, and increased steady state alpha1(I) procollagen mRNA levels by up to 104 +/- 22%. These effects are mediated via interaction of thrombin with the PAR-1 receptor since TRAP ( Thrombin Receptor Activating Peptide) stimulated procollagen production by 23  $\pm$  -0.5%. In addition, conditioned medium from thrombin-treated cells stimulated procollagen production by 30 +/-3% suggesting that thrombin is acting via the production and/or release of an autocrine mediator. These data suggest a novel role for thrombin in vascular wound healing and the development of pathological conditions associated with increased connective tissue deposition.